

**FORM PTO-1449**  
**(Rev. 2-32)**

**U.S. Department of Commerce**  
**Patent and Trademark Office**

**Att. Docket No.**

03-465-C (400/142)

**Serial No.**

10/757,803

**SECOND SUPPLEMENTAL  
INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use several sheets if necessary)

**Applicant:**

McSwiggen et al.

**Filing Date:**

January 14, 2004

**Group:**

1635

**U.S. PATENT APPLICATION DOCUMENTS**

Examiner Initial		Document Number	Filing Date	Name	Class	Subclass	Publication Date if Appropriate
/AB/	*	US-2002/0086356	03/30/01	Tuschl et al.			07/04/02
	*	US-2002/0151693	02/08/01	Breaker et al.			10/17/02
	*	US-2003/0064945	07/25/01	Akhtar et al.			04/03/03
	*	US-2003/0190635	07/25/02	McSwiggen et al.			10/09/03
	*	US-2003/206887	09/16/02	Morrissey			11/06/03
	*	US-2005/0182005	05/13/04	Tuschl et al.			02/18/05
↓	*	US-2005/0227256	11/26/04	Hutvagner et al.			10/13/05

**U.S. PATENT DOCUMENTS**

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
/AB/	*	5,998,148	12/07/99	Bennett et al.			
	*	5,998,206	12/07/99	Cowsert			
	*	6,214,805	04/10/01	Torrence et al.			
	*	6,346,398	02/12/02	Pavco et al.			
	*	6,573,099	06/03/03	Graham et al.			
↓	*	6,824,972	11/30/04	Kenwick et al.			

EXAMINER

/Amy Bowman/

DATE CONSIDERED

10/11/2007

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FORM PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 03-465-C (400/142)	Serial No. 10/757,803
SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary)		Applicant: McSwiggen et al.	
		Filing Date: January 14, 2004	Group: 1635

/AB/	*	7,078,196	07/18/06	Tuschi et al.			
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## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclasses	Translation	
							Yes	No
/AB/ ↓ ↓ ↓ ↓ ↓	1.	08208687	08/13/96	JP (Hotoda et al.) ABSTRACT ONLY				
	2.	03/044188	11/21/02	WO (Tei et al.)				
	3.	03/70918	08/23/03	WO (McSwiggen et al.)				
	4.	04/048566	11/21/03	WO (Saigo et al.)				
	5.	05/028650	03/31/05	WO (Jadhav et al.)				
	6.	05/049821	11/18/04	WO (Naito et al.)				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

/AB/	7.	Alexeev et al., "Localized in vivo genotypic and phenotypic correction of the albino mutation in skin by RNA-DNA oligonucleotide," <i>Nature Biotechnology</i> , 18:43-47 (2000)
/AB/	8.	Allerson et al., "Fully 2'-Modified Oligonucleotide Duplexes with Improved in Vitro Potency and Stability Compared to Unmodified Small Interfering RNA," <i>J. Med. Chem.</i> , 38:901-904 (2005)

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/AB/	9.	Bayard et al., "Increased stability and antiviral activity of 2'-O-phosphoglyceryl derivatives of (2'-5')oligo(adenylate)," <i>Eur. J. Biochem.</i> , 142(29):291-298 (1984)
	10.	Bernstein et al., "The rest is silence," <i>RNA</i> , 7:1509-1521 (2001)
	11.	Bitko et al., "Phenotypic silencing of cytoplasmic genes using sequence-specific double-stranded short interfering RNA and its application in the reverse genetics of wild type negative-strand RNA viruses," <i>BMC Microbiology</i> , 1:34 (11 pgs) (2001)
	12.	Braasch et al., "Novel Antisense and Peptide Nucleic Acid Strategies for Controlling Gene Expression," <i>Biochemistry</i> , 31:14, 4503-4510 (2002)
	13.	Braasch et al., "RNA Interference in Mammalian Cells by Chemically-Modified RNA," <i>Biochemistry</i> , 42, 7967-7975 (2003)
	14.	Caplen, Natasha J., "RNAi as a gene therapy approach," <i>Expert Opin. Biol. Ther.</i> , 3(4):575-586 (2003)
	15.	Claverie, Jean-Michel, "Fewer Genes, More Noncoding RNA," <i>Science</i> , 309, 1529-1530 (2005)
	16.	Czauderna et al., "Structural variations and stabilising modifications of synthetic siRNAs in mammalian cells," <i>Nucleic Acids Research</i> , 31(11):2705-2716 (2003)
	17.	Czech, Michael P., "MicroRNAs as Therapeutic Targets," <i>The New England Journal of Medicine</i> , 354, 1194-1195 (2006)
	18.	Elbashir et al., "Analysis of gene function in somatic mammalian cells using small interfering RNAs," <i>Methods</i> , 26:199-213 (2002)
	19.	Hamasaki et al., "Short interfering RNA-directed inhibition of hepatitis B virus replication," <i>FEBS Letters</i> , 543:51-54 (2003)
	20.	Holen et al., "Positional effects of short interfering RNAs targeting the human coagulation trigger Tissue Factor," <i>Nucleic Acids Research</i> , 30:8, 1757-1766 (2002)
	21.	Hornung et al., "Sequence-specific potent induction of IFN- $\alpha$ by short interfering RNA in plasmacytoid dendritic cells through TLR7," <i>Nature Medicine</i> , 11, 263-270 (2005)
↓	22.	Jen et al., "Suppression of gene Expression by Targeted Disruption of Messenger RNA: Available Options and Current Strategies," <i>Stem Cells</i> , 18:307-319 (2000)

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/AB/	23.	Judge et al., "Sequence-dependent stimulation of the mammalian innate immune response by synthetic siRNA," <i>Nature Biotechnology</i> , 23(4):457-462 (2005)
	24.	Mattick, John S., "The Functional Genomics of Noncoding RNA", <i>Science</i> , 309, 1527-1528 (2005)
	25.	McCaffrey et al., "RNA interference in adult mice," <i>Nature</i> , 148, 38-39 (2002)
	26.	Monia et al., "Evaluation of 2'-Modified Oligonucleotides Containing 2'-Deoxy Gaps as Antisense Inhibitors of Gene Expression," <i>J. Biol. Chem.</i> 268:14514-14522 (1993)
	27.	Morvan et al., "Comparative Evaluation of Seven Oligonucleotide Analogues as Potential Antisense Agents," <i>J. Med. Chem.</i> , 36, 280-287 (1993)
	28.	Olie et al., "Analysis of ribosyl-modified, mixed backbone analogs of a bcl-2/bcl-xL antisense oligonucleotide," <i>Biochimica et Biophysica Acta</i> , 1576, 101-109 (2002)
	29.	Prakash et al., "Positional Effect of Chemical Modifications on Short Interference RNA Activity in Mammalian Cells," <i>J. Med. Chem.</i> , 48, 4247-4253 (2005)
	30.	Schmidt et al., "Base and sugar requirements for RNA cleavage of essential nucleoside residues in internal loop B of the hairpin ribozyme: implications for secondary structure," <i>Nucleic Acids Research</i> 24:573-581 (1996)
	31.	Semizarov et al., "siRNA-mediated gene silencing: a global genome view," <i>Nucleic Acids Research</i> , 32(13):3836-3845 (2004)
	32.	Sethupathy et al., "TarBase: A comprehensive database of experimentally supported animal microRNA targets," <i>RNA</i> , 12:192-197 (2006)
	33.	Thomson et al., "Activity of hammerhead ribozymes containing non-nucleotidic linkers," <i>Nucleic Acids Research</i> 21:5600-5603 (1993) (MAY BE REFERRED TO AS THOMPSON)
	34.	Vickers et al., "Efficient Reduction of Target RNAs by Small Interfering RNA and RNase H-dependent Antisense Agents," <i>Journal of Biological Chemistry</i> , 278, 7108-7118 (2003)
↓	35.	Zhang et al., "Single Processing Center Models for Human Dicer and Bacterial RNase III," <i>Cell</i> , 118:57-68 (2004)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10757803
Filing Date	2004-01-14
First Named Inventor	McSwiggen
Art Unit	1635
Examiner Name	Bowman, Amy Hudson
Attorney Docket Number	03-465-C (400/142)

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/AB/	1	20020137210		2002-09-26	Churikov			
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Application Number		10757803
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First Named Inventor	McSwiggen	
Art Unit	1635	
Examiner Name	Bowman, Amy Hudson	
Attorney Docket Number	03-465-C (400/142)	

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
/AB/	1	Bellon et al., "4-Thio-oligo-β-D-ribonucleotides: synthesis of β-4'-thio-oligouridylates, nuclease resistance, base pairing properties, and interaction with HIV-1 reverse transcriptase," Nucleic Acids Research, 21(7):1587-1593 (1993)	<input type="checkbox"/>
/AB/	2	Database CAPLUS on STN, AN:1992:230597, Segarra et al., "Molecular Characterization of the Enterococcus Faecalis Cytolysin Activator", Infection and Immunity, 1991, Vo. 59, No. 4, pages 1239-46	<input type="checkbox"/>
/AB/	3	Kumar et al., "Characterisation and expression of a PPI serine/threonine protein phosphatase (PfPPI) from the malaria parasite, Plasmodium falciparum: demonstration of its essential role using RNA interference," Malaria Journal, 1:5 (2002)	<input type="checkbox"/>
/AB/	4	Taira et al., "Construction of a novel RNA-transcript-trimming plasmid which can be used both in vitro in place of run-off and (G)-free transcriptions and in vivo as multi-sequences transcription vectors," Nucleic Acids Research 19:5125-5130 (1991)	<input type="checkbox"/>

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